The KHIE ConnectionPartnering to Improve Patient Health Outcomes

About KHIE

The Commonwealth of Kentucky strives to be a leader in our nation's journey to advance health information technology to transform paper health records into electronic health records. With initiatives underway to enhance the quality, safety, and efficiency of health care for all Kentuckians, the Commonwealth is at the forefront of Health information Technology.

The Kentucky Health Information Exchange offers the Commonwealth an unparalleled opportunity to support our health care system in adopting and using health information technology. This will not only encourage but enable you, the health care provider, to participate in a secure Health Information Exchange (HIE), where valuable health information will be available when and where it is needed to achieve the best positive patient outcomes. Because other industries have already embraced information technology, our health care system can capitalize on advances already made to ensure the privacy and security of shared health information.

What is the KHIE Connection?

KHIE is a secure, interoperable network in which participating providers with certified EHR technology can use to locate and share needed patient information with each other which results in improved coordination of care among physician practices, hospitals, labs, and across the various health systems. This integration enables you to view a patient's consolidated medical history, including current medication lists and diagnoses, to ensure more informed clinical decisions at the point of care.

Why Connect?

Connectivity through the KHIE promotes the comprehensive management of health information. Complete patient health information is needed to accurately diagnose and treat your patients. Access to the KHIE gives you the ability to view other participating provider's records to see your patient's complete medical history. You and your patients will benefit from the use of the health information exchange, as this exchange of data facilitates better and quicker access to complete, accurate patient information. Because this data can be shared more readily, you can diagnose health problems earlier and, ultimately, improve the health outcomes of your patients. The KHIE connection will be compliant with national interoperability standards and will facilitate connecting to other states and to the Nationwide Health Information Network (NHIN). Additionally, the use of electronic health records will empower patients, especially today's "tech savvy" generation, to take a more active role in their health and in the health of their families. It is crucial that the effort to transform our country's healthcare through the use of health information technology is embraced by all.

KHIE now offers the services of our five Outreach Coordinators who are assigned to different regions of the state to encourage provider adoption of electronic medical records and promote connectivity to the exchange.

What are the Benefits?

- Real-time access to patient health information
  - Detailed patient summary
  - Rx/medication history
  - Laboratory results
  - Radiology and other transcribed reports
  - Clinical reminders/alerts
- Improves patient care quality and safety
- Reduces health care costs by reducing duplication of care
  Improves efforts to reduce health disparities
- Informs medical decisions at the time/place of care

In addition to all these benefits, connectivity to KHIE helps you, the provider, meet specific objectives in Stage One of Meaningful Use to receive <u>EHR incentive funds.</u>

Who are Our Partners?

To intensify the speed of provider adoption and maximize data availability, the KHIE is collaborating with Kentucky's two Regional Extension Centers (RECs), The University of Kentucky Regional Extension Center and HealthBridge Tri-State Regional Extension Center. The RECs were awarded federal monies and have been tasked with the principal objective of assisting primary care practices with the adoption of EHRs and achieving meaningful use.

The KHIE Outreach Coordinators are teaming with the REC Implementation Specialists to coordinate activities to maximize resources and efforts to facilitate EHR adoption, support achievement of meaningful use, assist with the application for incentive funds, and encourage connectivity to KHIE.

How do I make the KHIE Connection?

The Governor's Office of Electronic Health Information (GOEHI) is available to assist you in securing connectivity to KHIE. At this time connectivity is being offered free for as long as the grant funding is available.

To view our welcome packet, visit our website at http://chfs.ky.gov/os/goehi/khie.htm
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Introduction

The Kentucky Health Information Exchange (KHIE) offers the Commonwealth an unprecedented opportunity to advance health information technology and support healthcare providers in adopting and implementing electronic medical records (EMR). Through coordinating the delivery of more efficient care via electronic health record (EHR) exchange, the KHIE will improve patient health outcomes and population health. It will also enable healthcare providers to achieve stage 1 meaningful use.

Background

Governor Steve Beshear issued an Executive Order in August, 2009 establishing the Governor's Office of Electronic Health Information (GOEHI) in the Cabinet for Health and Family Services (CHFS) to oversee the advancement of health information exchange in Kentucky. Work immediately began on the technical infrastructure of the KHIE. Funding for this momentous task was received from both the Centers for Medicare and Medicaid Services (CMS) and the American Recovery and Reinvestment Act (ARRA). In addition to the funding opportunity, the ARRA provided a roadmap and guidance to the development and implementation of the nationwide electronic health information system. As a result, almost every state in the United States is pushing to strengthen their efforts in transforming the nation's healthcare system from paper records to electronic.

Kentucky received over 9 million dollars to advance the use of electronic health information exchange and support eligible healthcare providers across the state in achieving stage 1 meaningful use of certified technology. Eligible providers who demonstrate meaningful use of certified EMRs will receive incentive payments beginning in January, 2011.

In light of the benefits and consequences to the healthcare providers and consumers alike, KHIE has a solid commitment to support statewide adoption of electronic health information exchange. To that end, KHIE provides a common,

secure electronic information infrastructure. The KHIE architecture meets national standards to ensure interoperability across various health systems and connectivity to the National Health Information Network (NHIN). The system

affords healthcare providers the functionality to support preventive health and disease management through alerts, messaging, and other tools. The design of KHIE is flexible in that, as criteria for determining meaningful use expands beyond stage 1, functionality will be added to support providers in achieving meaningful use.

The KHIE provides a baseline set of functions available across the state to support the exchange of electronic health information. Consumption of health information exchange services by one stakeholder does not reduce availability for others, and no healthcare stakeholder can be effectively excluded from appropriately using interoperable health information exchange services. The value of information increases with use, and the value of one set of information increases when linked with other information. Core components of KHIE include a master-patient index, record-locator service, security, provider-user authentication, logging, audits and alerts. The focus of KHIE is on improving the health, quality and safety of healthcare for Kentucky's residents and visitors through the provision of a statewide, interoperable health information exchange.

Connectivity

The KHIE offers participating healthcare providers two options of connectivity based on their current practices and technical capabilities. The first option is based on the ability to send and receive Continuity of Care Documents (CCDs) via defined industry standards. Recognizing that this is an emerging standard and that many Healthcare Information Systems (HIS) do not yet have this capability in their current releases, the KHIE provides an alternate connectivity through standard HL7, ADT, clinical transaction, and order messages. The second option is commonly used in information exchange today and provides the same capabilities for providers seeking to demonstrate stage 1 meaningful use. These two options are detailed in the following sections of this welcome guide.

Connectivity Option 1: Participants with CCD Capability

Healthcare providers who have the capability of sending or receiving CCDs connect via the web services provided by the KHIE. In this option, the CCD will be created by the HIS upon receiving an inquiry from the KHIE, and will then be consolidated with CCDs from other providers and with data extracted from Edge Servers described in Option 2. The consolidated CCD will then be returned to the inquiring provider's HIS, or displayed in the KHIE Community Virtual Health Record, also described in Option 2. Functional specifications required for this connectivity model are in the KHIE Participant Connectivity Guide, which can be found on the GOEHI website and will be discussed during the on-boarding process.

Connectivity Option 2: Participants without CCD Capability

Healthcare providers choosing this option will be connected to the KHIE utilizing Edge Server technology with VPN tunnel connectivity. This process includes a

standard series of HL7 transactions sent via the healthcare provider's HIS to a secure Edge Server for storage and retrieval. The Edge Server is logically dedicated to and managed by that individual provider, and not co-mingled with

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other providers' data. From the Edge Server, the data is made available to the KHIE for exchange with other connected healthcare providers via inquiry, or through the KHIE Community/Virtual Health Record (VHR). The KHIE Community VHR is a web-based portal that may be distributed to those healthcare providers who require access to the patient's summary health data, but do not have the capability of sending or receiving a CCD. As the provider's HIS begins the implementation of the capability to consume a CCD, KHIE staff will assist in that transition.

To initiate connectivity under this option, the healthcare provider will need to complete the following forms, which will be provided by our staff during the 'onboarding' process after the signed Participation Agreement is approved of by KHIE:

- VPN Tunnel Information Connectivity Worksheet
- Readiness Assessment Document (hospitals)
- Configuration Checklist
- Physician Address Book

Information from these forms will be used to optimize the transactions utilized for connectivity to the KHIE. Upon completion and submission of these forms, a representative from the KHIE contacts the provider and begins the process of obtaining connectivity.

The GOEHI staff will be available at any time to discuss any of these options, or answer any questions about KHIE utilization at 502-564-7992.

KHIE at Full Implementation